

Appendix 3. Alternatives Considered but Not Analyzed in Detail

Population Growth Suppression without Removals

This alternative would not meet the purpose and need to achieve population objectives. It would not allow for population regulation by removing wild horses to achieve and maintain AML on the Sulphur HMA. Wild horse management under this alternative would involve gathering and inoculating mares with PZP or other population growth suppression vaccines as outlined in Alternatives 1 and 2. Gather, data collection, and handling techniques would be followed in accordance with Alternatives 1 and 2. Mares inoculated during the winter of 2022 and other years the vaccine was administered would foal normally in the spring following treatment. Reproduction would be limited the following year or years after treatment.

The current population within the Sulphur HMA exceeds the AML as established in the Pinyon MFP, Warm Springs Resource Area RMP/ROD, and the Sulphur Wild Horse Herd Management Area Plan (HMAP). The current AML numbers are established in the HMAP. Implementing population growth suppression without removing excess wild horses would not address the immediate need of achieving AML and a TNEB. Population modeling shows that using this alternative with the currently available immunocontraceptives would not control the population of wild horses and would not be in conformance with the WFRHBA, Pinyon MFP, Warm Springs Resource Area RMP/ROD, and the Sulphur Wild Horse Herd Management Area Plan. The WFRHBA mandates the BLM to prevent the range from deterioration associated with overpopulation and preserve and maintain a TNEB in consideration with multiple use relationships.

Removal or Reduction of Livestock within the HMA

This alternative is not in the scope of the decision to be made and would not meet the purpose and need. This alternative would involve no removal of wild horses and instead would address excess wild horse population numbers through the removal or reduction of livestock within the HMA. This alternative was not brought forward for detailed analysis because it is inconsistent with multiple use management, as required by FLPMA, the Pinyon MFP, the Decision Record for EA-UT-040-04-47 and the WFRHBA, which directs the Secretary to immediately remove excess wild horses when BLM has determined that an overpopulation exists on a given area and that action is necessary to remove excess animals.

Livestock grazing can only be reduced on permits following the process outlined in the regulations found at 43 CFR Part 4100. Several reductions and changes have already been made to livestock grazing within allotments associated with the Bible Spring Complex under this authority. The elimination of livestock grazing in an area would require an amendment to the land use plans, which is outside of the scope of this analysis. Such changes to livestock grazing cannot be made through a wild horse gather decision. Monitoring and evaluation of livestock grazing is in accordance with the Pinyon MFP's Rangeland Program Summary Section IV, 17.

Additionally, re-allocating livestock AUMs to wild horses would not achieve the purpose and need identified in Section 1.2 or a TNEB. Livestock can be confined to specific pastures, limited

periods of use, and specific seasons-of-use to minimize impacts to vegetation during the critical growing season and to riparian zones during the summer months. Wild horses are present year-round and their impacts to rangeland resources cannot be controlled through establishment of a grazing system. Thus, impacts from wild horses can only be addressed by limiting their numbers to a level within AML that was established to avoid adverse impacts to rangeland resources and other multiple uses.

Gather Wild Horses to the AML Upper Limit

A post-gather population size at the upper level of the AML range (165 to 250) would result in the AML being exceeded the next foaling season (March 1 – June 30). This would be unacceptable for several reasons, including that it does not meet the purpose and need.

The AML represents “that ‘optimum number’ of wild horses which results in a thriving natural ecological balance and avoids a deterioration of the range” (Animal Protection Institute, 109 IBLA 119; 1989). The Interior Board of Land Appeals (IBLA) has also held that “Proper range management dictates removal of horses before the herd size causes damage to the rangeland. Thus, the optimum number of horses is somewhere below the number that would cause resource damage” (Animal Protection Institute, 118 IBLA 63, 75; 1991).

The upper level of the AML established within a HMA represents the maximum population at which a TNEB would be maintained. The lower level represents the number of animals to remain in a HMA following a wild horse gather, to allow for a periodic gather cycle, and to prevent the population from exceeding the established AML between gathers.

Additionally, gathering to the upper range of AML would result in the need to follow up with another gather within one year (with resulting stress on the wild horse population), and could result in overutilization of vegetation resources and damage to the rangeland if the BLM were unable to gather the excess horses in the HMA on an annual basis. This alternative would not achieve a TNEB and would not prevent further degradation of the rangeland associated with excess wild horses. For these reasons, this alternative did not receive further consideration in this document.

Raising the AML for Wild Horses

Raising the AML where there are known resource degradation issues associated with the current overpopulation of wild horses does not meet the purpose and need of restoring a TNEB or the need to meet rangeland health standards. This alternative would delay a gather until the AML can be reevaluated is inconsistent with the WFRHBA, which directs BLM to manage the range to prevent deterioration associated with excess wild horses and the Secretary to immediately remove excess wild horses and to manage for a TNEB and for multiple uses. The AML was last reevaluated in the Sulphur Wild Horse HMAP. There is no basis for modifying the AML at this time because available data shows that excess wild horses are present on the range, that excess horses need to be removed, and that there is insufficient water and forage within the HMA to support an increase in the wild horse AML (see appendices 10-14). Given the resource degradation occurring with the current overpopulation of wild horses, it is necessary to bring the population back to AML first so the agency can collect additional data that would

help inform whether the range could support additional horses above AML while still ensuring a TNEB. Given the absence of data that would support a modification to the AML, this gather decision is not an appropriate mechanism for adjusting AML.

Population Growth Suppression Treatment Only Including Using Bait/Water Trapping To Dart Mares with PZP Remotely (No Removal)

The alternative is technically infeasible, would not meet the purpose and need, and would be contrary to the WFRHBA. Population modeling was completed to analyze the potential impacts associated with conducting gathers approximately every 3 years over the next 10-year period to treat captured mares with population growth suppression. Under this alternative, no excess wild horses would be removed. The use of bait or water trapping would still not remove excess wild horses. While the average population growth rate would be reduced, AML would not be achieved, and the damage to the range associated with wild horse overpopulation would continue. The use of remote darting to administer PZP within the HMA where the horses are not accustomed to human activity has been shown to be very difficult. For example, in the Cedar Mountain HMA during a two-year study by Humane Society (unpublished) where administration of PZP by remote darting was to occur, not a single horse was successfully darted.

Bait or Water Trap Only

An alternative considered but eliminated from detailed analysis was use of bait and/or water trapping as the primary gathering method. The use of bait and water trapping, though effective in specific areas and circumstances, would not be timely, cost-effective, or technically feasible as the primary gather method for this HMA for the following reasons: (1) the project area is too large to effectively use this gather method; (2) road access for vehicles to potential trapping locations necessary to get equipment in/out as well as to safely transport gathered wild horses is limited; (3) the presence of scattered water sources on both private, state and public lands inside and outside the HMA would make it almost impossible to restrict wild horse access to the extent necessary to effectively gather and remove the excess animals through bait and/or water trapping to achieve management goals; and (4) the large number of horses that would need to be captured within a year period using only this method requires logistical resource (panels, trucks, trailers, personal etc.) that are not available to the local or state BLM. However, as discussed in the EA, water or bait trapping may be used to achieve the desired goals of Alternatives 1 and 2 if gather efficiencies are too low using a helicopter, a helicopter gather cannot be scheduled, or to help maintain AML once achieved.

Controlling Wild Horse Numbers by Natural Means

This alternative is substantially similar to the No Action Alternative. This alternative was eliminated from further consideration because it is contrary to the WFRHBA, which requires the BLM to prevent the range from deterioration associated with an overpopulation of wild horses. It is also inconsistent with the Pinyon MFP and Warm Springs Resource Area RMP/ROD, and the HMAP which direct the BLM to conduct gathers as necessary to achieve and maintain the AML. The alternative of using natural controls to achieve a desirable AML has not been shown to be feasible in the past as indicated by the population increases between gathers. Wild horses in

the Sulphur HMA are not substantially regulated by predators. In addition, wild horses are a long-lived species with documented foal survival rates exceeding 95 percent, and they are not a self-regulating species. The National Academies of Sciences report (2013) investigated the claim that wild horses can “self-regulate” their herds and concluded that horse populations are expected to behave much as other ungulates. As such, wild horses are not expected to self-regulate their herd sizes at levels that would maintain a TNEB. Rather, decreases in wild horse growth rates would only be expected to take place after available natural resources have become so limited by overgrazing and overuse of water that horse body condition is severely impaired. It is expected that foals and nursing mothers may be the first to suffer starvation and death by thirst. Populations would be expected to crash due to resource limitation, but only after extensive ecological damage had occurred. Allowing populations to be regulated by starvation, death by thirst, and ecological resource degradation would not be consistent with the WFRHBA. This alternative would result in a steady increase in numbers, which would continually exceed the carrying capacity of the range until severe and unusual conditions that occur periodically – such as blizzards or extreme drought – caused catastrophic mortality of wild horses (see Population Modeling).

Gather and Release Excess Wild Horses Every Two Years and Apply Two-Year PZP to Horses for Release.

This alternative would not meet the purpose and need and would be infeasible. Based on past gathers that the BLM has conducted in the Bible Spring Complex area, only 60-70% of the population can be gathered in a single gather operation due to excessive tree cover, vast area, terrain, and behavior of the target animals. Another alternative considered was to gather a substantial portion of the existing population (90 percent) and implement population growth suppression treatment only, without removal of excess horses. This was modeled using a two-year gather/treatment interval over a 10-year period. The effectiveness of the 22-month PZP-22 is somewhat in question based on the most recent pen trials which show diminishing effectiveness over time. Based on WinEquus population modeling, this alternative would not result in attainment of AML for the HMA. The wild horse population would continue to have an average population growth rate of 10 percent to 18.6 percent, which would add to the current wild horse overpopulation, albeit at a slower rate of growth than would likely occur under the No Action Alternative.

This modeling reflected an average population size in 11 years of 1,424 to 2,722 total wild horses under a two-year treatment interval. In 90 percent of the modeled trials, this alternative would not decrease the existing overpopulation of wild horses, resource concerns and rangeland deterioration would continue, and implementation would result in substantially increased gather and population growth suppression costs relative to the alternatives that remove excess wild horses to the AML range.

Use of Gelding as Non-reproductive Population to Reduce Population Growth Rate

This alternative would not meet the purpose and need. A non-reproductive population of gelding was excluded from further consideration at this time due to there being more effective ways to adequately reduce the female horse fertility rates within the Complex. Moreover, by

itself, it is unlikely that sterilization (gelding) would allow the BLM to achieve a population within AML or other management objectives of reducing population growth rate since a single stallion is capable of impregnating multiple mares, and stallions other than the dominant harem stallion may also breed with some mares. Therefore, to be fully effective, use of sterilization to control population growth requires that either the entire male population be gathered and treated (which is not practical) or that some percentage of the female wild horses/burros in the population be gathered and treated. If the treatment is not of a permanent nature (e.g., application of the PZP-22 vaccine to mares) the animals would need to be gathered and treated on a cyclical basis.

Allow Public to Capture and Remove Wild Horses

An alternative using members of the public to gather wild horses through a permitting process was suggested by the public. This alternative was eliminated from further consideration because it is contrary to the WFRHBA.

The WFRHBA placed all wild free-roaming horses and burros that occur on public lands under the jurisdiction of the Secretary of the Interior and Secretary of Agriculture for the purpose of management and protection in accordance with the provisions of that Act. It places penalties on members of the public that willfully remove or attempt to remove a wild free-roaming horse or burro from the public lands without authorization. The WFRHBA would need to be changed to allow this type of alternative. An administrative process to implement this alternative, which currently does not exist, would need to be developed.

Use Alternative Capture Techniques Instead of Helicopters to Capture Excess Wild Horses

An alternative using capture methods other than helicopters and bait/water trapping was suggested by the public. This alternative is technically infeasible and was eliminated from further consideration. These alternate methods could include chemical immobilization, net gunning, and wrangler/horseback drive trapping as potential methods for gathering horses. Net gunning techniques normally used to capture big game also rely on helicopters. Chemical immobilization is a very specialized technique and is strictly regulated. Currently, the BLM does not have sufficient expertise to implement either of these methods, and they would be impractical to use given the size of the Bible Spring Complex, access limitations, and approachability of the horses.

Use of wrangler on horseback drive-trapping to remove excess wild horses can be fairly effective on a very small scale, but due to the number of excess horses to be removed, the large geographic size of the Bible Spring Complex, access limitations, and approachability of the horses, this technique would be ineffective and impractical. Horseback drive-trapping is also very labor intensive and can be very harmful to the domestic horses and the wranglers used to herd the wild horses.

Designate the Blawn Wash HMA and/or the Bible Spring Complex to be Managed Principally for Wild Horse Herds

This alternative would address the issue of excess wild horses in the Blawn Wash HMA and Bible Spring Complex through the complete removal of authorized livestock grazing, instead of by gathering and/or removing excess wild horses and burros from the HMA. This alternative would be contrary to the Pinyon MFP and the Bible Spring, Blawn Wash, Four Mile and Tilly Creek Wild Horse Appropriate Management Level (AML) Assessment, UT-040-04-47 (DR signed April 18, 2005), by allowing the wild horse and burro population to remain above AML. Therefore, this alternative does not meet the purpose and need to achieve and maintain the established AMLs.

This alternative is also inconsistent with the Wild Horse and Burro Act, which directs the Secretary to immediately remove excess wild horses and burros when a determination is made that such a removal is necessary to achieve a thriving natural ecological balance. The available monitoring data does not indicate a need to change the level of livestock grazing. Nor does the available monitoring data indicate that changes to AML are warranted at this time, since there is no evidence of changes in habitat conditions (such as greater availability of water) that would allow for increases in the wild horse AML.

The current population of wild horses above AML is resulting in adverse impacts to water sources, riparian/wetland sites, and vegetation. Even in areas where there has been little to no livestock grazing, monitoring data indicates that wild horse and burro impacts are affecting the BLM's ability to manage for rangeland health.

The current level of authorized livestock grazing has been established through inventory and monitoring data over the past 50 years. Forage allocations for livestock have been made in accordance with forage and habitat needs for wildlife and wild horses. The BLM has not received any new information that would indicate a need to change the level of livestock grazing at this time. Furthermore, the BLM establishes grazing systems to manage livestock grazing through specific terms and conditions that confine grazing to specific pastures, limit periods of use, and set utilization standards. These terms and conditions minimize livestock grazing impacts to vegetation during the growing season and to riparian zones during the summer months.

Wild horses, however, are present year-round, and their impacts to rangeland resources cannot be controlled through establishment of a grazing system, such as for livestock. Thus, impacts from wild horses can only be addressed by limiting their numbers to a level that does not adversely impact rangeland resources and other multiple uses.

While the BLM is authorized to remove livestock from HMAs "if necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury" (43 CFR § 4710.5), this authority is usually applied in cases of specific emergency conditions and not for the general management of wild horses or burros under the Wild Horse and Burro Act, as wild horse and burro management is based on

the land-use planning process, multiple use decisions, and establishment of AML. For these reasons, this alternative was eliminated from further consideration.